

ABSTRACT

A method for sintering a porous-glass material to form a glass base material, which is a base material for an optical fiber, includes preparing a ring heater having an opening, through which the porous-glass material passes, for heating the porous-glass material; selecting the porous-glass material having an outer diameter ( $d$ ) within a predetermined range, the predetermined range being determined based on an inner diameter ( $D$ ) of the opening of the ring heater; and heating the porous-glass material in an atmosphere of dehydration gas and inert gas with the ring heater.